

Title (en)

Method of detecting a movement of a measuring probe and measuring instrument

Title (de)

Verfahren zur Bewegungserkennung einer Messsonde und Messinstrument

Title (fr)

Procédé de détection du mouvement d'une sonde de mesure et instrument de mesure

Publication

**EP 2163906 B1 20140226 (EN)**

Application

**EP 08016297 A 20080916**

Priority

EP 08016297 A 20080916

Abstract (en)

[origin: EP2163906A1] A method of detecting a movement of a measuring probe provided between an objective lens adapted to image an object plane on a predetermined image plane and the object plane is disclosed. Additionally, a measuring instrument comprising an objective lens and a measuring probe is disclosed. An input beam of light is split into a measurement beam and a reference beam. The measurement beam is focused on a reverse focal plane of the objective lens such that the measurement beam is collimated by the objective lens. The collimated measurement beam is reflected at the measuring probe. The reflected measurement beam is directed towards the objective lens such that the objective lens focuses the reflected measurement beam on the reverse focal plane. The reflected measurement beam is collimated. The collimated reference beam and the reference beam are superimposed to form a superimposed beam and an interference between the reflected measurement beam and the reference beam is detected.

IPC 8 full level

**G01Q 20/02** (2010.01); **G01Q 30/02** (2010.01); **G01B 9/02** (2006.01)

CPC (source: EP US)

**G01B 9/02031** (2013.01 - EP US); **G01Q 20/02** (2013.01 - EP US); **G01B 2290/70** (2013.01 - EP US)

Cited by

EP3404424A1; CN113639675A; EP2613121A1; CN110235044A; US11320454B2; US9062958B2; WO2018212645A1; EP2199733A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

**EP 2163906 A1 20100317**; **EP 2163906 B1 20140226**; JP 2010071989 A 20100402; US 2010067021 A1 20100318; US 8345260 B2 20130101

DOCDB simple family (application)

**EP 08016297 A 20080916**; JP 2009208533 A 20090909; US 46181009 A 20090825